

## **CLAIM AMENDMENTS**

### **Claim Amendment Summary**

#### **Claims pending**

- Before this Amendment: Claims 1, 3-7, 9-11, 13-23, 25-27, 30-35 and 38-41.
- After this Amendment: Claims 1, 3, 4, 7, 9-11, 14-17, 19, 21-23, 25-27, 30-34, 38 and 39.

**Non-Elected, Canceled, or Withdrawn claims:** Claims 5, 6, 13, 18, 20, 35 and 40-41.

**Amended claims:** Claims 1, 4, 9-11, 17, 23, 32-34, 38 and 39.

**New claims:** None.

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### **Claims:**

**1. (Currently amended)** A method comprising:

monitoring one or more players in a game, ~~wherein the game is monitored only on~~ a game server;

deciding, based on [[said] the monitoring, identifying one or more player-exploitable game conditions, ~~wherein~~ the player-exploitable game conditions ~~[[are]]~~ being programming conditions, situations, or aberrations produced within the game that give the one or more cheating players an advantage against other players without the one or more cheating players hacking the game, ~~[[and]] the deciding comprising:~~

~~are identified by observing the players' play of the game;~~

setting a threshold against which the play of the one or more players is compared, ~~wherein~~ the threshold being modified in real time on basis of ~~is set based on~~ a rate at which the scores and virtual objects of the one or more players are acquired during the game; ~~virtual property is acquired during the play and wherein the threshold is configured to be modified in real time; and~~

triggering a player monitor for one or more potential cheating players whose rate of acquiring the scores and virtual objects is greater than the threshold, the player monitor logging game data about activities of the one or more potential cheating players in the game, the activities including locations, enemies injured or eliminated, objects gained or traded for each of the one or more potential cheating players;

determining the one or more potential cheating players are cheating in the game based at least in part on the logged game data, and in an event the one or more potential cheating players are cheating in the game;

identifying the player-exploitable game conditions of which the one or more potential cheating players are taking the advantage in the game

~~identifying, among the players, one or more cheating players who are exploiting the player-exploitable game conditions, the identifying comprising comparing the rates at which the cheating players acquire the virtual property in the game against the threshold, whereby the cheating players and player-exploitable game conditions are dealt with to prevent from further occurrence.~~

2. (Canceled).
3. (Original) The method of claim 1, wherein the monitoring is automatic.
4. (Currently amended) The method of claim 1, wherein the monitoring checks for the one or more potential cheating players ~~cheating player~~.
- 5-6. (Canceled).
7. (Original) The method of claim 1, wherein a cheater detection portion performs the monitoring.
8. (Canceled).
9. (Currently amended) The method of claim 1, further comprising sending a notice to the one or more potential cheating players ~~the cheating player~~.
10. (Currently amended) The method of claim 1, further comprising terminating the one or more potential cheating players' ~~the cheating player's~~ privileges for a prescribed duration.

**11. (Currently amended)** The method of claim 1, further comprising sending a notice to players other than ~~the cheating player~~ the one or more potential cheating players describing the activities of the one or more potential cheating players ~~cheating player~~.

**12-13. (Canceled).**

**14. (Original)** The method of claim 1, wherein the player-exploitable game condition includes positioning the player at some location other than a ground plane within a virtual scene.

**15. (Original)** The method of claim 1, wherein the player-exploitable game condition includes rollover of a player's score.

**16. (Original)** The method of claim 1, wherein the player-exploitable game condition includes rollover of a player's expense.

**17. (Currently amended)** An apparatus implemented at least in part by a computing device comprising:

a processor;

one or more computer readable media; and

a computer program encoding a game including a cheater detection portion that identifies one or more player-exploitable game conditions and detects players who are exploiting at least one of said player-exploitable game conditions, the player-exploitable game conditions being programming conditions, situations, or aberrations produced within a game that give the players an advantage without the players hacking the game, the cheating detection portion comprising:

a player game scoring portion configured to keep record of how well one or more potential players are performing in a game;

a player monitor portion configured to determine whether the one or more potential players are likely to be cheating based on the record provided by the player game scoring portion by comparing actual rate of acquiring scores by the one or more potential players against a threshold;

a criteria based logging portion configured to log game data including scores and virtual objects of the one or more potential players in the game over an extended duration, the game data being analyzed to identify the one or more player-exploitable game conditions in the game and detect the players who are exploiting the one or more player-exploitable game conditions; and

an alert portion configured to transmit alert messages reporting the one or more player-exploitable game conditions and the one or more potential cheating players

~~wherein the cheater detection portion further sets a threshold against which the play of a number of players is compared, wherein the threshold is set based on~~

~~the rate at which virtual property is acquired and can be modified in real time, and wherein the cheater detection portion detects the players who are exploiting at least one of said player exploitable game conditions by identifying the players whose rate exceeds the threshold.~~

**18. (Canceled).**

**19. (Original)** The apparatus of claim 17, wherein the cheater detection portion includes an asynchronous activity pump.

**20. (Canceled).**

**21. (Original)** The apparatus of claim 17, wherein the cheater detection portion is included as a portion of a network.

**22. (Original)** The apparatus of claim 17, wherein the cheater detection portion is included as a portion of a stand-alone computer system.

**23. (Currently amended)** A method comprising:  
setting a threshold for a game, wherein the threshold is set based on a rate at which virtual property is acquired and the threshold ~~[[can]]~~ is configured to be modified in real time;

monitoring play of a plurality of players for one or more player-exploitable game conditions, ~~wherein the play is monitored only on a game server, and wherein the one or more player-exploitable game conditions~~ comprising one or more of ~~comprise at least a~~ rollover situation ~~[[or]]~~ and a dupping situation in which one or more cheating players take an unfair advantage by exploiting such situation without hacking the game, wherein:

the rollover situation happens in the game where number of digits for scoring, purchasing or other game activities are too low to describe all potential transactions; and

the dupping situation happens in the game where one or more cheating players duplicate an item by exploiting buffer overrun code in a manner that causes a game server to crash and recover with user data reflecting game status of the one or more cheating players prior to the game server crash;

determining whether the threshold is exceeded for any of the players of the game;  
logging the play of the player whose play exceeds the threshold to a computer storage media; and

identifying the one or more player-exploitable game conditions and the one or more cheating players who exploit the player-exploitable game conditions ~~and whose play exceeds the threshold for the game~~ based at least in part on the logged play, whereby the cheating players are dealt with to prevent from further occurrence.

## **24. (Canceled).**

**25. (Previously presented)** The method of claim 23, further comprising changing the threshold when the game is being played.

**26. (Original)** The method of claim 23, wherein the threshold can be reset.

**27. (Original)** The method of claim 23, wherein the determining whether the threshold is exceeded is based on the rate at which a particular player is acquiring virtual property.

**28-29. (Canceled).**

**30. (Previously Presented)** The method of claim 23, further comprising punishing the one or more cheating players.

**31. (Previously Presented)** The method of claim 23, further comprising modifying the game based on the one or more cheating players.

**32. (Currently amended)** A computer readable medium having computer executable instructions that, when executed by a processor, causes the processor to perform a method, the method comprising:

monitoring one or more players in a game on a game server;



deciding, based on the monitoring, one or more player-exploitable game conditions, the player-exploitable game conditions being programming conditions, situations, or aberrations produced within the game that give the one or more players an advantage against other players without the one or more players hacking the game, the deciding comprising:

setting a threshold against which the play of the one or more players is compared, the threshold being modified in real time on basis of a rate at which the scores and virtual objects of the one or more players are acquired during the game;

triggering a player monitor for one or more potential cheating players whose rate of acquiring the scores and virtual objects is greater than the threshold, the player monitor logging game data about activities of the one or more potential cheating players in the game, the activities including locations, enemies injured or eliminated, objects gained or traded for each of the one or more potential cheating players;

determining the one or more potential cheating players are cheating in the game based at least in part on the logged game data, and in an event the one or more potential cheating players are cheating in the game:

identifying the player-exploitable game conditions of which the one or more potential cheating player are taking the advantage in the game

~~setting a threshold for a game, wherein the threshold is set based on the rate at which virtual property is acquired and the threshold can be modified in real time;~~

~~monitoring play of a plurality of players for one or more player exploitable game conditions, wherein the play is monitored only on a game server, and wherein the one or more player exploitable game conditions comprise at least a rollover situation or a dupping situation in which one or more cheating players take an unfair advantage by exploiting such situation without hacking the game; and~~

~~determining whether the threshold is exceeded for any of the players of the game.~~

**33. (Currently amended)** The computer readable medium having computer executable instructions of claim 32, wherein the determining the one or more potential cheating players are cheating is based in part ~~method further comprises determining whether the player is cheating based on logging [[the]] play of the one or more potential cheating players~~ player whose play exceeds the threshold.

**34. (Currently amended)** The computer readable medium having computer executable instructions of claim 32, wherein the threshold is configured to ~~[[can]]~~ be reset.

**35-37. (Canceled).**

**38. (Currently amended)** The computer readable medium having computer executable instructions of claim 32, wherein the method further comprises

punishing one or more potential cheating players, ~~wherein the cheating players are one or more players who exceed the threshold for the game.~~

**39. (Currently amended)** The computer readable medium having computer executable instructions of claim 32, wherein the method further comprises modifying the game based on one or more potential cheating players, ~~wherein the cheating players are one or more players who exceed the threshold for the game.~~

**40-41. (Canceled).**